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October 25, 2004

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Mr. Ali Abdelwahed  
US Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Mr. Abdelwahed,

Thank you for your kindly help during our telephone conversation regarding our patent application # 10/672,471. As I stated in our conversation I had no prior knowledge of any ball that was of a similar nature to my idea. I am a hands-on person and when I got the idea for this ball I immediately started experimenting with my lathe. I first made a wooden mold and then aluminum into which I inserted expandable foam to create a prototype. I now have a hollow version that is air filled.

In response to the Official Action of August 2, 2004, please amend the application as indicated on the following page to clarify the claims.

In reviewing my designs and in comparing it to the patents that have been previously granted, I have found the following differences:

- 1) There is a flat portion on the bottom lip of my ball which allows the Laminar air flow to move across the flat area and move into the channeled groove around the ball thus creating a turbulent air which creates a vacuum and thus adding lift to the balls flight. On the opposite end it hits the groove and forces air in a downward direction adding an up lift to the back side of the rim. As it is spun through the air these forces constantly change aiding in the flight. (See diagram figure #4)
- 2) The Spector patent uses a simple sphere, where as my design is made up of 2 separate spheres intersecting at the interval of the rim, with the bottom sphere having a higher axis point than the top portion. (See diagram figure #2)
- 3) Spector does not use an annular rim groove for aerodynamic lift.
- 4) Opresik has an annular rim but no laminar flow is being created by the edge, and his single sphere is the same radius with the rim encompassing it at higher point making the larger portion on the bottom side.
- 5) Perez has no lip and the top and bottom surfaces of the sphere are equal.
- 6) Lovik is the closest; however it again has a simple sphere where the axis point is in the center.
- 7) Heisler's is a different concept altogether, it is flat until thrown and then inflates through a channel in the lip, it has a simple sphere with the center axis and it's rim is flat and has no channel to create a turbulent flow for lift.

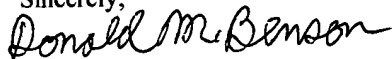
We believe that our design is completely different than any of the designs that have been brought up in objection to our claim. The secret to my design is the proportions of the spherical sectors in relation to each other, the lower portion having a larger diameter than the upper portion and that are equal at the point of intersection meeting the annular rim. These are related to the outer rim diameter as shown in figure #1 and figure #2 showing a section through the center of figure #1. Figure #3 also shows the proportion of the flat portion to the groove. All of the proportions can vary plus or minus 10%.

Upon careful examination of the diagrams on the following pages you will see that I have taken Spheres of two different sizes and connected them at the specific point where the grooved annular rim is placed. Careful attention has been placed on the specific sizes of the spheres in relation to each other, and to the size, shape and proportions of the annular rim and its groove in relation to the spheres. The reason that the spheres are of two different sizes and the point at which they meet is to create a greater upper surface as in a birds or airplanes wing.

I know that there are many wonderful ideas and much imagination in creating new products, I respect these ideas and that others are working in this area also. I know the work and study that is involved in creating and bringing an idea to fruition and would not want to nor do I feel I have infringed on anyone else's idea. If after reviewing this letter and claims you still feel I am infringing on another's patent please indicate the one which is in objection to mine and I will contact them as to infringement rights.

Thank you again for your consideration of my claim and I am looking forward to your reply.

Sincerely,

A handwritten signature in black ink that reads "Donald M. Benson". The signature is written in a cursive, flowing style.

Donald M Benson